

Claims

- [c1] 1. A flexible passenger vehicle body capable of being transformed into at least two different classes of vehicle styles, comprising:
- a body shell having front and rear openings and at least one pair of transversely opposed door openings;
 - a front panel closing the body shell front opening;
 - a pair of door panels closing the body shell door openings;
 - a roof panel including a fixed portion and a movable portion, the movable portion having attached thereto a pair of transversely opposed rear pillars extending generally downward therefrom to engage the body shell;
 - a back panel coupled to the roof panel movable portion and extending between the rear pillars;
 - a pair of opposing retractable rear side panels affixed to the body shell behind the door panels; and
 - a tailgate affixed to the body shell,
- the tailgate, the retractable rear side panels, the roof panel movable portion and the back panel collectively enclosing the body shell rear opening when the vehicle is in a first body configuration,
- the front panel, door panels, roof panel, back panel, tail-

gate and retractable rear side panels defining a fully enclosed passenger space and cargo area within the body shell in the first body configuration when the roof panel movable portion is in a first position, the front panel, door panels, roof panel and back panel defining a contracted enclosed passenger space in a second body configuration when the roof panel movable portion is in a second position, thereby creating an open cargo area behind the contracted enclosed passenger space.

- [c2] 2. The vehicle body of claim 1, further comprising a midgate and shelf panel which cooperate with the back panel and the body shell to separate the contracted enclosed passenger space from the open cargo area.
- [c3] 3. The vehicle body of claim 1, further comprising a trunk panel configured to cooperate with the tailgate and the body shell in a third body configuration, thereby creating a closed cargo area behind the contracted enclosed passenger space.
- [c4] 4. The vehicle body of claim 1, wherein the retractable rear side panels include rear side windows, the rear side windows being retractable into the body shell.
- [c5] 5. The vehicle body of claim 1, further comprising a

movable side trim panel disposed adjacent the roof panel, the movable side trim panel being movable between a first position and a second position, the second position facilitating transformation of the vehicle body from the first body configuration to the second body configuration.

[c6] 6. The vehicle body of claim 1, further comprising a garnish panel, the garnish panel being in a first position when the vehicle body is in the first body configuration and a third position when the vehicle body is in the second body configuration, the garnish panel further being movable to a second position, thereby facilitating transformation of the vehicle body between the first body configuration and the second body configuration.

[c7] 7. The vehicle body of claim 1, wherein the open cargo area includes a load floor, and wherein the tailgate in an open position forms a portion of the load floor.

[c8] 8. The vehicle body of claim 7, further comprising a floor panel pivotally attached to the tailgate, the floor panel being configured to form a portion of the load floor between the tailgate and a main portion of the load floor when the tailgate is in the open position.

[c9] 9. A vehicle, comprising:

a transformable vehicle body including first and second opposing door panels, a roof panel, including a fixed portion and a movable portion, a back panel attached to the roof panel movable portion, and first and second retractable rear side panels disposed rearward the door panels, the transformable vehicle body having at least a first body configuration and a second body configuration,

the first body configuration including the retractable rear side panels and the roof panel movable portion each in an extended position, the first body configuration at least partially defining a first passenger compartment, the second body configuration including the retractable rear side panels and the roof panel movable portion each in a retracted position, the second body configuration at least partially defining a second passenger compartment and an open cargo area, the second passenger compartment being smaller than the first passenger compartment and at least partially separated from the open cargo area by the back panel.

- [c10] 10. The vehicle of claim 9, further comprising a controller configured to facilitate automatic transformation of the vehicle body between different body configurations.

- [c11] 11. The vehicle of claim 9, further comprising a first seat having a midgate and a shelf panel attached thereto, the midgate and the shelf panel being configured to cooperate with the back panel to at least partially separate the second passenger compartment from the open cargo area.
- [c12] 12. The vehicle of claim 9, wherein the retractable rear side panels include rear side windows, the rear side windows being retractable into the vehicle body.
- [c13] 13. The vehicle of claim 9, further comprising a movable side trim panel disposed adjacent the roof panel, the movable side trim panel being movable between a first position and a second position, the second position facilitating transformation of the vehicle body from the first body configuration to the second body configuration.
- [c14] 14. The vehicle of claim 9, further comprising a garnish panel, the garnish panel being in a first position when the vehicle body is in the first body configuration and a third position when the vehicle body is in the second body configuration, the garnish panel further being movable to a second position, thereby facilitating transformation of the vehicle body between the first body configuration and the second body configuration.

- [c15] 15. The vehicle of claim 9, wherein the first passenger compartment includes three rows of seats disposed therein, and the second passenger compartment includes only two rows of seats disposed therein, each row of seats including at least one seat.
- [c16] 16. The vehicle of claim 9, further comprising a first pillar attached to the roof panel movable portion and a second pillar attached to the roof panel fixed portion, the first and second pillars having one of the retractable rear side panels disposed therebetween in the first body configuration, and the first and second pillars being adjacent to each other in the second body configuration.
- [c17] 17. The vehicle of claim 9, further comprising a tailgate having an open position and a closed position, the tailgate in the closed position being configured to cooperate with the back panel in the first body configuration to partially define the first passenger compartment, the tailgate being further configured to partially define the open cargo area in the second body configuration.
- [c18] 18. The vehicle of claim 17, further comprising a trunk panel configured to cooperate with the tailgate in a third body configuration, thereby partially defining a closed cargo area behind the contracted enclosed passenger

space.

- [c19] 19. The vehicle of claim 17, wherein the open cargo area includes a load floor, and wherein the tailgate in the open position forms a portion of the load floor.
- [c20] 20. The vehicle of claim 19, further comprising a floor panel pivotally attached to the tailgate, the floor panel being configured to form a portion of the load floor between the tailgate and a main portion of the load floor when the tailgate is in the open position.
- [c21] 21. The vehicle of claim 19, further comprising a second seat, the second seat having a first position for seating a vehicle occupant, and a second position for forming a portion of the load floor.
- [c22] 22. The vehicle of claim 21, wherein the second seat includes a seat back and a movable load panel attached to the seat back, the movable load panel having a retracted position for facilitating space conservation when the second seat is in the first position, and an extended position whereby the movable load panel forms a portion of the load floor when the second seat is in the second position.
- [c23] 23. A method of transforming a vehicle body from a first body configuration to at least one other body configura-

tion, the first body configuration including a fully enclosed passenger space and cargo area, and a second body configuration including a contracted enclosed passenger space and an open cargo area, the method comprising:

retracting first and second rear side portions;

moving a seat from a first position for seating a vehicle occupant to a second position, thereby forming a portion of a load floor;

moving a side trim panel from a first position to a second position, thereby facilitating movement of another trim panel over the side trim panel;

moving a garnish panel from a first position to a second position, thereby facilitating forward movement of a roof panel portion and a rear pillar attached to the roof panel portion;

moving the roof panel portion and pillar forward;

moving a shelf panel adjacent a back panel, thereby substantially separating the contracted enclosed passenger space from the open cargo area; and

moving the garnish panel from the second position to a third position, thereby placing the vehicle body in the second body configuration.

[c24] 24. The method of claim 23, further comprising covering a portion of the open cargo area with a trunk panel,

thereby forming a closed cargo area behind the contracted enclosed passenger space in a third body configuration.